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### (54) Flip chip package for micromachined semiconductors

(57) A hermetic multilayered ceramic semiconductor package for micromachined semiconductor devices. A low temperature co-fired ceramic assembly has a cavity and a top and bottom surface. Several vias extend between the top and bottom surfaces and several solder spheres are located on the top surface and are electrically connected to the vias. A micromachined semiconductor device abuts the bottom surface and covers the cavity such that a movable portion of the micromachined semiconductor device is unconstrained to move within the cavity. Solder is used to connect the vias to solder bumps on the semiconductor device. A seal ring is located between the micromachined semiconductor device and the ceramic assembly for hermetically sealing the micromachined semiconductor device.

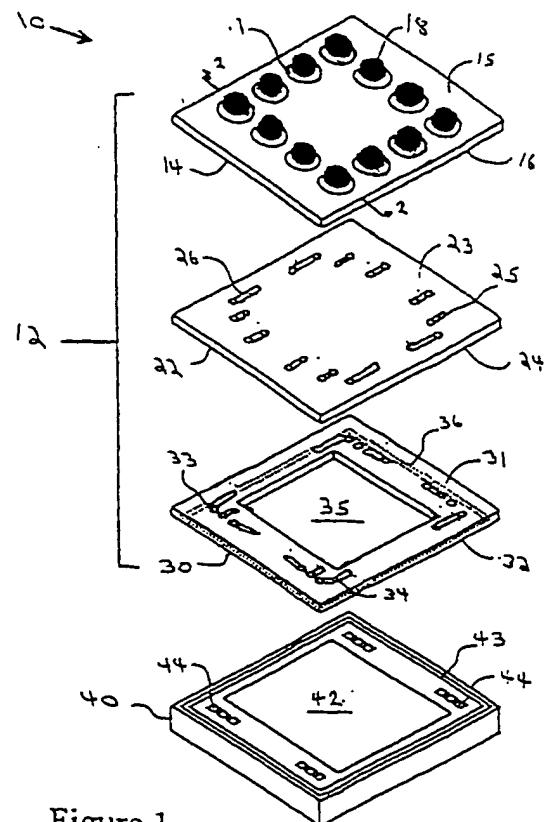


Figure 1



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 00 30 3286

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.)
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X	US 5 898 218 A (HIROSE SHINICHI ET AL) 27 April 1999 (1999-04-27) * figures 1-3 * * column 2, line 10 - column 3, line 31 * * column 5, line 59 - column 6, line 29 *	10	
Y A	—	2,3,5-9 1,4	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	22 July 2002	Polesello, P

## CATEGORY OF CITED DOCUMENTS

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ON EUROPEAN PATENT APPLICATION NO.

EP 00 30 3286

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22-07-2002

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